

**NOTES:**

1. PRECAST SUPPLIER SHALL DESIGN WALL PANEL CONNECTIONS FOR THE REACTIONS PROVIDED. SEE PRECAST PANEL SCHEDULE FOR THE VERTICAL AND HORIZONTAL PANEL REINFORCEMENT TO BE USED. PRECAST SUPPLIER SHALL VERIFY THAT THE REINFORCEMENT SPECIFIED IN THE SCHEDULE IS ADEQUATE FOR PANEL INSTALLATION AND FOR RESISTING CONNECTION FORCES.
2. SEE SHEET S2-522 FOR PRECAST PANEL TYPES.
3. SEE ARCHITECTURAL WALL ELEVATIONS FOR PANEL NUMBERS, SIZES, AND OPENING SIZES AND LOCATIONS.

**PRECAST PANEL SCHEDULE**

	PANEL	TYPE	PANEL CONNECTIONS	NOTES
			R1, R2 (LB/IN)	
POWER PLANT	16	A	98	
	17	A	94	
	18	A	212	
	19	A	174	
	20	A	193	
	21	C	104	ZONES 2 & 4 COMBINED - V: (8)-#4 TOTAL, EQ SPACED, ESW
	22	C	166	ZONES 2 & 4 COMBINED - V: (6)-#4 TOTAL, EQ SPACED, ESW
	23	C	126	ZONES 2 & 4 COMBINED - V: (7)-#4 TOTAL, EQ SPACED, ESW. GRATING BACK-UP NOT REQ'D
	24	B	146	ZONES 2 & 4 COMBINED - V: (8)-#4 TOTAL, EQ SPACED, ESW
	25	B	181	ZONES 2 & 4 COMBINED - V: (10)-#4 TOTAL, EQ SPACED, ESW
	26	B	160	ZONES 2 & 4 COMBINED - V: (12)-#4 TOTAL, EQ SPACED, ESW
	27	B	195	ZONES 2 & 4 COMBINED - V: (6)-#4 TOTAL, EQ SPACED, ESW
	28	D	158	ZONES 2 & 4 COMBINED - V: (6)-#4 TOTAL, EQ SPACED, ESW. GRATING BACK-UP NOT REQ'D
	29	D	181	ZONES 2 & 4 COMBINED - V: (10)-#4 TOTAL, EQ SPACED, ESW
	30	D	282	ZONES 2 & 4 COMBINED - V: (16)-#4 TOTAL, EQ SPACED, ESW. SOLID ZONES REQ'D
	31	C	178	ZONE 2 - V: (2)-#4 ESW
	32	C	155	ZONE 2 - V: (2)-#4 ESW
	33	A	98	
	34	A	146	V: (3)-#4

**NOTES:**

1. THE PANEL REINFORCEMENT WAS DESIGNED FOR THE SITE PERFORMANCE REQUIREMENTS. CHANGES BY THE CONTRACTOR IN PANEL DIMENSIONS, CONNECTION LOCATIONS, VERTICAL REINFORCEMENT, HEADER AND SILL REINFORCEMENT, OR MATERIALS MAY REQUIRE THE CONTRACTOR TO RETAIN THE SERVICES OF A QUALIFIED BLAST ENGINEER AND SUBSEQUENT REVIEW BY THE GOVERNMENT. THIS MAY RESULT IN CHANGES TO THE DESIGN, INCLUDING CONNECTION LOAD DEMANDS. ALL SUCH CHANGES SHALL BE IN ACCORDANCE WITH ACI 318 EXCEPT AS NOTED OR APPROVED, AND SHALL RESULT IN NO ADDITIONAL COST TO THE GOVERNMENT.
2. PANEL SIZING IS BASED ON A CONCRETE 28 DAY COMPRESSION STRENGTH ( $f_c$ ) OF 5000 PSI, ASTM A615 GRADE 60 REINFORCEMENT, AND FULLY LOADED OPENINGS.
3. PANEL REQUIRED REINFORCEMENT AND PANEL CONNECTION LOADS ARE BASED ON A 3-2-3 (CONCRETE-INSULATION-CONCRETE) COMPOSITE SANDWICH PANEL. LIFTING HARDWARE SHALL BE SIZED AND REINFORCEMENT SHALL BE VERIFIED OR INCREASED BY THE MANUFACTURER AS REQUIRED FOR ERECTION LOADS (SEE NOTE 1). CHANGES IN HORIZONTAL REINFORCEMENT (EXCLUDING HEADERS AND SILLS) AND THE ADDITION OF SOLID ZONES WILL NOT ADVERSELY AFFECT EXISTING DESIGN.
4. PRECAST DESIGN ASSUMES A COMPOSITE SHEAR TIE SYSTEM. THE COMPOSITE SHEAR TIE SYSTEM SHALL BE DESIGNED BY THE MANUFACTURER AND IS BASED ON THE TIE STRENGTH DERIVED FROM ICC AC-320 OR AC-422 AND EITHER THE ULTIMATE FLEXURAL STRENGTH OF THE PANEL OR THE SHEAR FLOW AT THE PANEL'S ULTIMATE FLEXURAL CAPACITY. THE ULTIMATE FLEXURAL STRENGTH OF THE PANEL IS THE LOWER OF EITHER THE CONCRETE CAPACITY OF THE COMPRESSION WYTHE OR STEEL CAPACITY OF THE TENSION WYTHE. THE SHEAR FLOW OR INTERFACE SHEAR DEMAND IS DERIVED USING ELASTIC CONCEPTS AND A UNIFORM LOAD THAT WOULD EQUATE TO THE ULTIMATE FLEXURAL CAPACITY OF THE PANEL.
5. PANEL CONNECTION DESIGN (PANEL TO STRUCTURE) IS THE RESPONSIBILITY OF THE MANUFACTURER AND SHALL BE DESIGNED USING
6. INCIDENTAL OPENINGS NOT CAPTURED IN PANEL DESIGNS SHALL FOLLOW ACI STANDARD OF PRACTICE.
7. PROVIDE MINIMUM REINFORCEMENT AS FOLLOWS UNO:  
V: #4@12" O.C., ESW (EACH STRUCTURAL WYTHE)  
H: #3@18" O.C., ESW

S2-521

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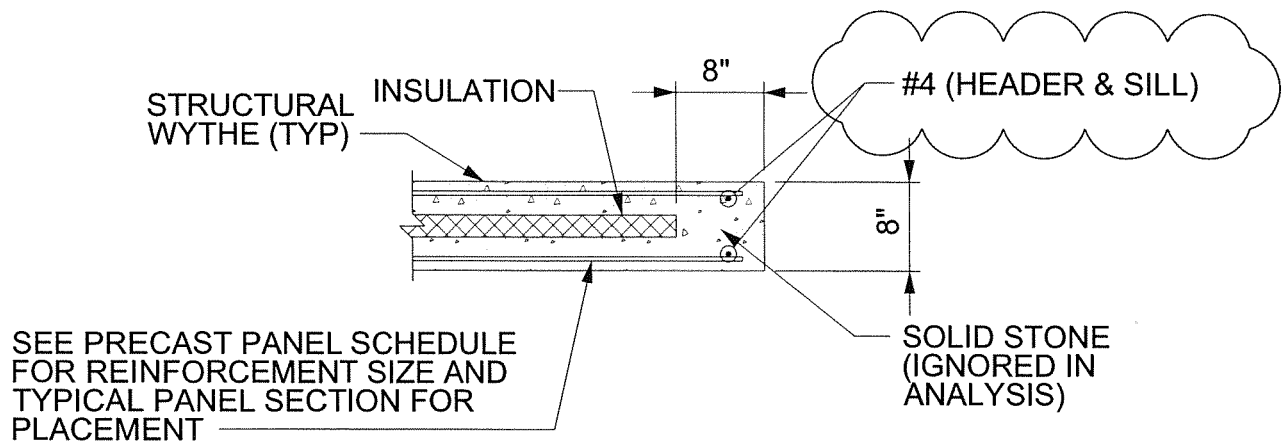
PRECAST PANEL SCHEDULE

	PANEL	TYPE	PANEL CONNECTIONS		NOTES
			MIN R1, R2	(LB/IN)	
CHILLER PLANT	1	A	426-3	147	
	2	A	147-5	137	
	3	A	199-2	373	
	4	A	126-3	147	
	5	C	126-3	176	ZONES 2 & 4 COMBINED - V: (6) - #4 EQ SPACED, ESW
	6	C	147-5	167	ZONES 2 & 4 COMBINED - V: (8) - #4 TOTAL EQ SPACED, ESW
	7	C	147-5	137	ZONES 2 & 4 COMBINED - V: (6) - #4 TOTAL EQ SPACED, ESW
	8	C	147-5	156	ZONES 2 & 4 COMBINED - V: (8) - #4 TOTAL EQ SPACED, ESW
	9	C	126-3	168	ZONES 2 & 4 COMBINED - V: (4) - #4 TOTAL EQ SPACED, ESW
	10	B	126-3	153	ZONES 2 & 4 COMBINED - V: (9) - #4 TOTAL EQ SPACED, ESW
	11	B	147-5	142	ZONES 2 & 4 COMBINED - V: (9) - #4 TOTAL EQ SPACED, ESW
	12	C	126-3	202	ZONE 4 - V: (3) - #4 ESW
	13	C	126-3	343	DOUBLE 15" X 16" LOUVER TREATED AS 3'-0" X 1'-6" OPENING ZONE 2 - V: (2) - #4 ESW, SOLID ZONE REQ'D
	14	C	147-5	163	ZONE 2 - V: (3) - #4 ESW
	15	C	147-5	203	ZONE 4 - V: (7) - #4 ESW

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*S3-521*



## TYPICAL HEADER/SILL/JAMB PANEL DETAIL

S2-522

S3-522